ABSTRACT OF THE INVENTION

The invention relates to a process of coating inorganic particles with organic compositions, and agglomerating, compacting and heating of the coated particles into granules. Coating and compacting the agglomeration may be conducted continuously, and may be used to form granules having sizes ranging from about 1 to about 200 mesh. In one embodiment, these particles can be used to purify drinking water by removing heavy metals such as arsenic, lead and mercury and to remove or kill microorganisms in the drinking water, air and gas.